

**Supplemental notice of Allowance**

1. Applicants' telephonic discussion of 11/19/2009 is acknowledged. Applicants discussed cancellation of claims 20-23 and their subsequent reinstatement.

**EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Tu A. Phan reg # 59,392 on 11/258/2009.

Please enter new claims 30, 31, 32 and 33.

Claim 30. (NEW): An immunogenic and non-haemolytic strain of *Actinobacillus pleuropneumoniae* having the characteristics of that deposited in the Colección Española de Cultivos Tipo under registration number CECT 5985, or a mutant thereof.

Claim 31. (NEW): A vaccine composition against porcine pleuropneumoniae comprising an immunogenically effective amount of the *Actinobacillus pleuropneumoniae* of Claim 30; and a pharmaceutically acceptable carrier.

Claim 32. (NEW): An immunogenic and non-haemolytic strain of *Actinobacillus pleuropneumoniae* having the characteristics of that deposited in the Colección Española de Cultivos Tipo under registration number CECT 5994, or a mutant thereof.

Claim 33. (NEW): A vaccine composition against porcine pleuropneumonia comprising an immunogenically effective amount of the *Actinobacillus pleuropneumoniae* of Claim 32, and a pharmaceutically acceptable carrier.

**Allowable Subject Matter**

3. The following is an examiner's statement of reasons for allowance:

Claims 13, 14, 15, 16, 17, 18, 19, 24, 25, 26, 27, 28, 29, 30-31, 32 and 33 are allowed. Claims are renumbered 1-17.

The instant invention is directed to an isolated immunogenic, non-haemolytic *Actinobacillus pleuropneumoniae* (App) strain comprises at least one mutation in a transmembrane domain- encoding segment of the *apxIA* gene wherein the segment of the *apxIA* gene corresponds to nucleotides 886 to 945, nucleotides 697 to 759, or nucleotides 1105 to 1215 of SEQ ID NO. 1, and with or without at least one mutation in a transmembrane domain-encoding segment of the *apxIIA* gene, wherein the segment of the *apxIIA* gene corresponds to nucleotides 886 to 945, nucleotides 697 to 759, or nucleotides 1105 to 1215 of SEQ ID NO. 2

The closest prior art MacInnes US 6,019,984 and Prideaux US 6,472,183 fail to teach or disclose the particular **mutation in a transmembrane domain- encoding segment of the *apxIA* gene wherein the segment of the *apxIA* gene corresponds to nucleotides 886 to 945, nucleotides 697 to 759, or nucleotides 1105 to 1215 of SEQ ID NO. 1.**

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Conclusion***

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khatol Shahnan-Shah whose telephone number is (571)-272-0863. The examiner can normally be reached on Monday-Friday 7:30 AM-5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert B. Mondesi can be reached on 571-272-0956.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Khatol S Shahnan-Shah/  
Examiner, Art Unit 1645  
November 25, 2009

/Robert B Mondesi/  
Supervisory Patent Examiner, Art Unit 1645